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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,808	09/26/2003	Peter Nilsson	SSJR 3370-P0058A	8907

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EXAMINER

BURCH, MELODY M

ART UNIT PAPER NUMBER

3683

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/672,808	<b>Applicant(s)</b> NILSSON ET AL.	
	<b>Examiner</b> Melody M. Burch	<b>Art Unit</b> 3683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**10/672808**

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-23, and 25-35 are rejected under 35 U.S.C. 102(e2) as being anticipated by US Patent 6481805 to Ichinose et al.

Re: claims 1, 5-8, 15-18, 23, and 27-29. Ichinose et al. show a vehicle brake system comprising: a brake actuator 1, a brake controller 10 operative to control said brake actuator, at least one position sensor 88 which senses a current position of at least one moveable brake component 2 and provides a current position signal indicative of the current position of the at least one moveable brake component to said brake controller as disclosed in col. 3 line 60-col. 4 line 3, and wherein said brake controller is operative to cause actuation of said brake actuator based at least in part upon a comparison of a position indicative command received by said brake controller indicative of a commanded position of the at least one moveable brake component with the current position signal as disclosed in col. 4 lines 22-40.

Re: claims 3, 4, 25, and 26. Ichinose et al. disclose the brake actuator comprising at least in part an electric motor. See col. 3 lines 20-22.

Re: claims 9-14, 19-21, 30-34. Ichinose et al. disclose the primary command comprising at least one of a commanded brake torque, a commanded friction force and a commanded clamping force, particularly a commanded brake torque and employing a slack or clearance position parameter.

Re: claims 22 and 35. Ichinose et al. disclose the sensor input being indicative of at least a current of the motor as disclosed in col. 4 lines 2-3.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 24, and 36-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichinose et al. in view of US Patent 4852699 to Karnopp et al.

Re: claims 2, 24, 36, 37, 40, and 41. Ichinose et al. describe the invention substantially as set forth above in the rejection of claims 1 and 23, but lack the limitation of the brake actuator being self-energizing. For the remaining limitations of claim 36 also see the rejection of claims 1 and 23.

Karnopp et al. teach in col. 1 lines 26-31 the use of a self-energizing actuator of a vehicle brake assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake actuator of Ichinose et al. to have been self energizing, as taught by Karnopp et al., in order to provide a means of multiplying the force urging the brake pads and disk into braking engagement as taught by Karnopp et al.

Re: claims 3, 4, 25, 26, 38, and 39. Ichinose et al. disclose the brake actuator comprising at least in part an electric motor. See col. 3 lines 20-22.

Re: claims 9-14, 19-21, 30-34, and 42-45. Ichinose et al. disclose the primary command comprising at least one of a commanded brake torque, a commanded friction force and a commanded clamping force, particularly a commanded brake torque and employing a slack or clearance position parameter.

Re: claims 22 and 35. Ichinose et al. disclose the sensor input being indicative of at least a current of the motor as disclosed in col. 4 lines 2-3.

### ***Response to Arguments***

5. Applicant's arguments filed 6/26/06 have been fully considered but are not persuasive. Applicant argues that no dynamic positional feedback is provided since the motor is engaged for a pre-determined number of revolutions. Examiner notes that the argument is more specific than the claim language. The claim requires the presence of a position sensor which senses a current position of the brake component and provides a current position signal indicative of the current position. Ichinose et al. provide a position sensor 88 which senses a current position of the brake component 2 and provides a current position signal indicative of the current position, particular of a current

position of contact of element 2 with element 3 as disclosed in col. 3 line 66 – col. 4 line 3. Applicant also argues that there is no comparison of a position indicative command with the current position signal. Examiner notes that in col. 4 lines 46-50 Ichinose et al. suggest that a position indicative command or the command controlling the movement of element 2 toward element 3 is compared to the contact or current position so that the motor driving power is reduced before reaching the contact or current position. Since Ichinose et al. include the limitations of the current position and the comparison of the current position with a position indicative command, the rejections have been maintained.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb  
September 1, 2006

*Melody M. Burch*  
**Melody M. Burch**  
**Primary Examiner**  
**Art Unit 3683**  
9/1/06